AGRONOMIC AND TEST INFORMATION: ETTER

TEST:	2007 Irrigated Silage Corn Performance Test
LOCATION:	Etter, Texas
COOPERATORS:	Wenwei Xu, Bruce Spinhirne, Thomas Marek, Brent Bean, Dennis Pietsch
SOIL TYPE:	Sherman clay loam
ROW WIDTH:	30"
PREVIOUS CROP:	Wheat
LAND PREPARATION:	Shred, disked, field cultivated, and listed. Seed beds were prepared using a rolling cultivator, and planted. The field was not cultivated after planting.
DATE PLANTED:	5-1-07: Planted on the bed with cones mounted on an ALMACO planter using JD Max-Emerge units.
PLOT LENGTH:	18.0'
FERTILIZER:	350 lb/A of N and 100 lb/A of P on March 12, 2007.
HERBICIDE:	Dual II Magnum at 1.67 pt/A and Atrazine 4L at 1.5 pt/A were applied on April 10, 2007.
	Option at 1.5 oz/A and Banvel at 8 oz/A were applied on June 7, 2007
INSECTICIDE:	Lorsban 15G was applied at 6.5 lb/A through planter boxes. Seeds were requested to be treated with a seed insecticide
FUNGICIDE:	Not applied.
RAINFALL:	May = 0.83"; June = 0.71"; July = 0.77”; August = 0.76”; Total = 3.70"
IRRIGATION:	May = 1.90"; June = 5.46"; July = 10.26”; August = 8.55”; Total = 26.17" applied through a center pivot system
DATE HARVESTED:	8-27-07, with a John Deer 5200 small-plot silage chopper equipped with a Hege Silage Plot Weighing System
SIZE HARVESTED PLOT:	2 rows, 18.0' long
TEST DESIGN:	Randomized complete block
NUMBER ENTRIES:	26
NUMBER REPLICATIONS:	3
NUMBER ROWS/PLOT:	4 (harvested 2-rows per plot)
TARGET PLANT POP:	30,976 plants/A

MEAN PLANT POP:	29,830 plants/A
SILAGE QUALITY:	Dried sub-samples were sent to and analyzed by Dairy One Forage Lab (Ithaca, NY) using NIR methods.
TEST MEAN:	29.98 short tons/A; yields corrected to 65.0% moisture
TEST MEAN MOIST:	65.9%
TEST C.V.:	5.71% for silage yield and 1.6% for silage moisture.

COMMENTS: Plant population was fixed to the target population and to relatively uniform plant-to-plant distance by hand-removing doubles. The rainfall from planting to harvesting was only 3.71 inches. The field was irrigated three times per week at the 100% ET level. Insecticide Lorsban was applied at planting to control rootworm. There was no cultivation during the season except the applications of herbicides to control grass and broad leaf weeds. At harvest, about 2 lb of the chopped sub-samples were taken, weighed for fresh weight, dried at 50^0C for 3-4 three days, weighed for dry weight, and then analyzed for silage quality using NIR method by the Diary One Forage Lab (Ithaca, NY).

Overall, the field was well managed, weeds were well controlled, plant population was good and uniform, fertilizers and water were sufficient.

The test mean forage yield adjusted to 65% moisture was 29.98 short tons/A. The average moisture was 65.9%, within the reasonable range for harvesting silage corn. Stalk and root lodging were rare and therefore not recorded. This was a very uniform test as reflected by the C.V. of 5.71% for forage yield and 1.6% for the forage moisture.